

# Malaysian Consumer Awareness and Perspectives towards ASEAN NCAP

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**Abstract** – ASEAN NCAP has been in existence for the last eight years. Over these years, multiple initiatives had been undertaken to stress the importance and relevance of vehicle safety to the consumers. This study is undertaken to study and gauge the levels of understanding with regards to the vehicle safety assessment through ASEAN NCAP, amongst the consumer in Malaysia. A total of 428 respondents was involved in this study and the survey had been conducted throughout the major cities in Malaysia. The analysis shows that three main factors contributes to the buying decision of vehicles in Malaysia, they are fuel economy, comfort technology and safety assist technology. Air conditioning and the navigation system were the most important technology that is preferred by the consumers in their selection of vehicles to purchase. The study also reveals that an emphasis is placed on vehicle safety, as the Anti-Lock Braking System (ABS), the Anti-Theft Devices/Alarms and the Emergency Braking Assist (EBA), as being the required priority when choosing a vehicle to be purchased. In comparison with a previous study done, it further shows that the awareness and the level of understanding of ASEAN NCAP had increased to 36 %. This value indicates that the effectiveness of these numerous promotional activities conjured by various stakeholders has had an impact. Nevertheless, continuous effort needs to be effected to ensure the ASEAN NCAP becomes a sensible benchmark for potential buyers in Malaysia in making purchase decisions.

**Keywords:** Vehicle safety, consumer awareness, ASEAN NCAP, comfort technology, Safety Assist Technology (SAT)

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## 1.0 INTRODUCTION

The number of death resulting from road traffic injuries are on steady yearly increase. In 2016 records showed, there were 1.35 million of deaths attributable to road traffic injuries (WHO, 2018). In efforts to reduce road casualty, vehicle safety has become an important emphasis and is viewed as the benchmark (Jawi et al., 2017). Vehicle safety addresses the safety of all road users and currently comprises measures for crash avoidance and injury prevention (primary safety), reduction of injury in the event of a crash (crash protection or secondary safety) and those which can help to reduce the consequences of injury (ERSO, 2016; Isa et al., 2013).

The New Car Assessment Program for Southeast Asian Countries, or known as ASEAN NCAP has brought several notable meanings to the region's socioeconomic development, particularly road safety (Isa et al., 2014a). ASEAN NCAP was set up in December 2011 as a cooperation exertion between the Malaysian Institute of Road Safety Research (MIROS) and Global NCAP in perspective of raising the level of vehicle safety in the region (Abu Kassim et al, 2016a; Abu Kassim et al., 2016b). ASEAN NCAP places emphasis upon awareness and education to the public about the importance of safety rating on cars sold within all the ASEAN countries. Currently, there is no definite legislation to be adhered to by car manufacturers in order to secure a "pass" on the assessment of ASEAN NCAP rating. It is regarded as being beneficial in having this 'star rating' of ASEAN NCAP, as most manufacturers would benefit as it signifies having a value-added identifier within their promotional and commercial campaign purposes.

Through the existence of this ASEAN NCAP rating, information regarding safety levels of produced vehicles from various automakers would be better disseminated. Thus, providing a sensible benchmark for all potential buyers to make purchasing judgements, that is not only limited to price, comfort and optional offerings.

Although various agendas have been introduced to elevate awareness of vehicle safety issues by the government via the ASEAN NCAP, this information may not reach to the consumers. In such, knowledge of NCAP is not effectively utilized in making considerations during vehicle purchases (Sultana & Ibrahim, 2014; Abu Kassim et al., 2016a; Isa et al., 2016; Abu Kassim et al., 2017)

Further, various promotional activities were also conducted in order to further increase the knowledge of this program amongst the public, but unfortunately these programs have not seemed to thrust any notable increase in awareness and the importance of vehicle safety upon users. The fact is, the availability and use of these ratings in making purchase decisions is still low and rarely is considered by market buyers (Jawi et al., 2013; Isa et al., 2014b). Thus, this study is aimed to gauge the level of consumers' awareness, knowledge and understanding towards the ASEAN NCAP. This process hopefully would also mitigate the formation of understanding on what the ASEAN NCAP rating has to offer, towards influencing their purchasing decision.

## 2.0 METHODOLOGY

A quantitative method was used in this study in order to obtain the information on the consumer awareness and their perception in ASEAN NCAP. A set of questionnaire was designed and adopted based on the collective of related literatures and study needs (Isa et al., 2012; Isa et al., 2014a; Isa et al, 2014b). The questionnaire comprises of three sections as follows:

- (i) Demographic Data – Consumer/Respondent Information
- (ii) Contributing Factors towards Consumer Buying Decision
- (iii) Knowledge on ASEAN NCAP

A simple random sampling technique was adopted in the study to select the sample respondents. A total of 500 sets of questionnaire were distributed to the major cities within Malaysia which are highly populated, with high levels of car ownership and having a high purchasing power. The respondents were Malaysian drivers from various backgrounds and holds a valid Malaysian driving licenses. All the collected data was then analysed using the Minitab version 17.

## 3.0 RESULTS AND DISCUSSION

This section shall discuss the result obtained from this study.

### 3.1 Demographic Data

A total of 428 respondents took part in this study which comprised an 85.6 % response rate. Based on Table 1, the male respondents were dominant (69.16 %) compared to female (30.84 %). The range of respondents were between 18 – 67 years old, with the highest age range of 77.57 % between 18 – 27 years old and with the driving experiences below than 10 years. Majority respondents came from the Klang Valley area, Kuala Lumpur (17.99 %) and Putrajaya (10.75 %). In terms of educational background, majority of the respondents possess a bachelor degree (57.48%). The monthly income ranges less than MYR 3,860 (64.25 %). Based on the feedback received, 60.05 % of respondents have the intention to buy a new car between 10 – 12 months with 47.2 % recorded that family is the main influencer of the purchase decision.

**Table 1:** Demographic data

<b>Variable</b>	<b>Percentage (%)</b>
<b>Gender</b>	
<i>Male</i>	<b>69.16</b>
Female	30.84
<b>Age</b>	
<i>18 - 27</i>	<b>77.57</b>
28 - 37	12.15
38 - 47	7.71
48 - 57	1.40
58 - 67	0.70
> 67	0.23

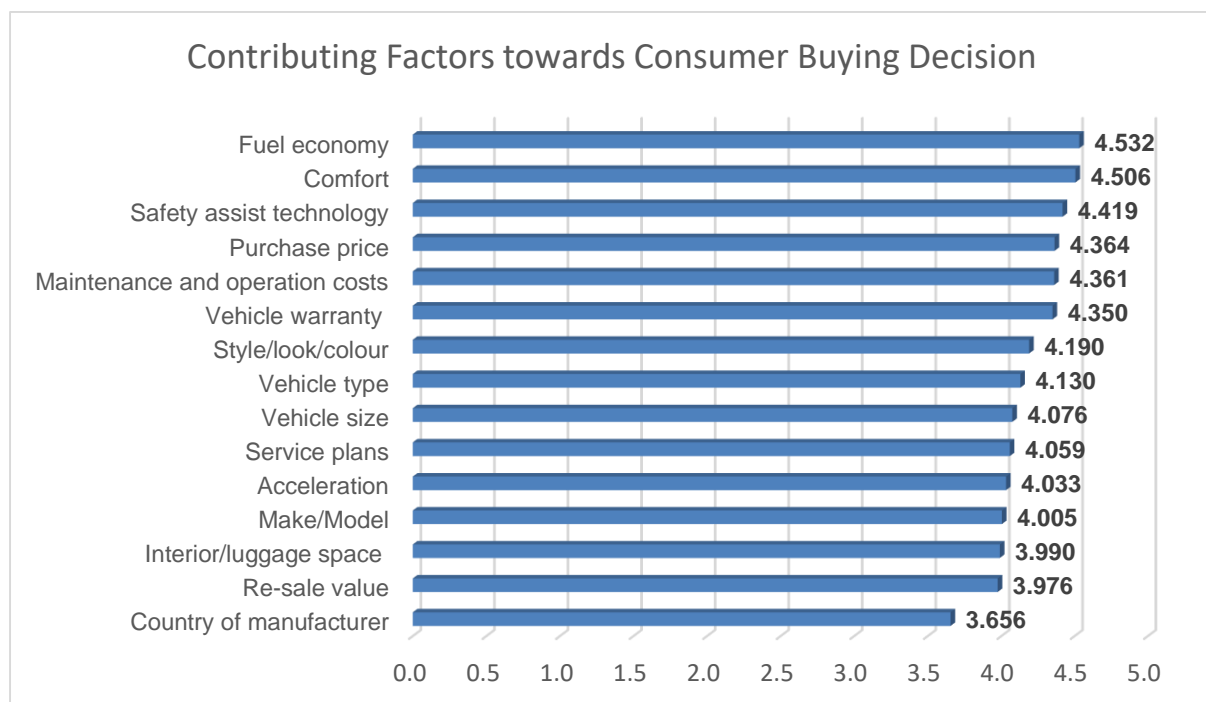
<b>Level of education</b>	
Secondary school	6.78
Diploma/equivalent	27.10
<b>Bachelor's Degree</b>	<b>57.48</b>
Master's Degree	5.14
PhD	3.50
<b>Respondent's city</b>	
Johor Bharu	2.57
Alor Setar	3.50
Kota Bharu	5.14
Malacca City	4.21
Seremban	7.71
Kuantan	3.04
Georgetown	2.57
Ipoh	2.34
Kangar	1.87
Kota Kinabalu	2.10
Kuching	2.10
Shah Alam	8.64
Kuala Terengganu	7.01
<b>Kuala Lumpur</b>	<b>17.99</b>
Labuan	1.64
Putrajaya	10.75
Others	16.82
<b>Monthly household income</b>	
< MYR 3,860	64.25
MYR 3,860 – MYR 8,319	20.79
> MYR 8,319	14.95
<b>Driving experience</b>	
<b>1 – 10 years</b>	<b>82.48</b>
11 – 20 years	12.38
21 – 30 years	4.91
> 30 years	0.23
<b>Influencer to buy a car</b>	
<b>Family</b>	<b>47.2</b>
Friends	4.21
Brand representative (celebrity)	0.70
Advertisement	0.47
Seller	0.93
Make my own choice	45.79
Family, Friends	0.70
<b>Intention to buy new car</b>	
<b>Yes</b>	<b>60.05</b>
No	39.95

<b>If Yes, Estimated time to buy new car</b>	
0 – 3 months	4.67
4 – 6 months	3.27
7 – 9 months	6.07
<b>10 – 12 months</b>	<b>46.03</b>

### 3.2 Contributing Factors towards Consumer Buying Decision

The top three important factors that is considered by respondents when purchasing a new vehicle, are fuel economy with an average of 4.53. Followed by comfort as the second main factor with the mean at 4.51. Then, safety assist technology is also selected as a consideration within the three main factor by the respondents when making purchase intentions of new vehicles with the mean scored at 4.42.

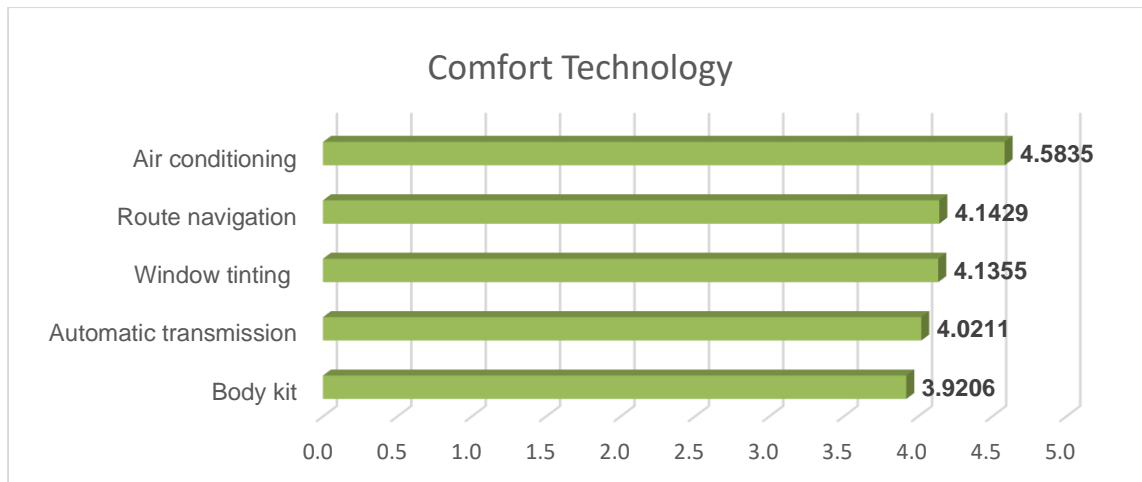
Country of manufacturer with number of mean 3.66 is the least significant factor that is being considered by respondents when purchasing a new vehicle. Figure 1 shows the list of factors that contributed towards consumer buying decision in selecting the vehicle.



**Figure 1:** Contributing factors towards consumer buying decision

#### 3.2.1 Comfort Technology

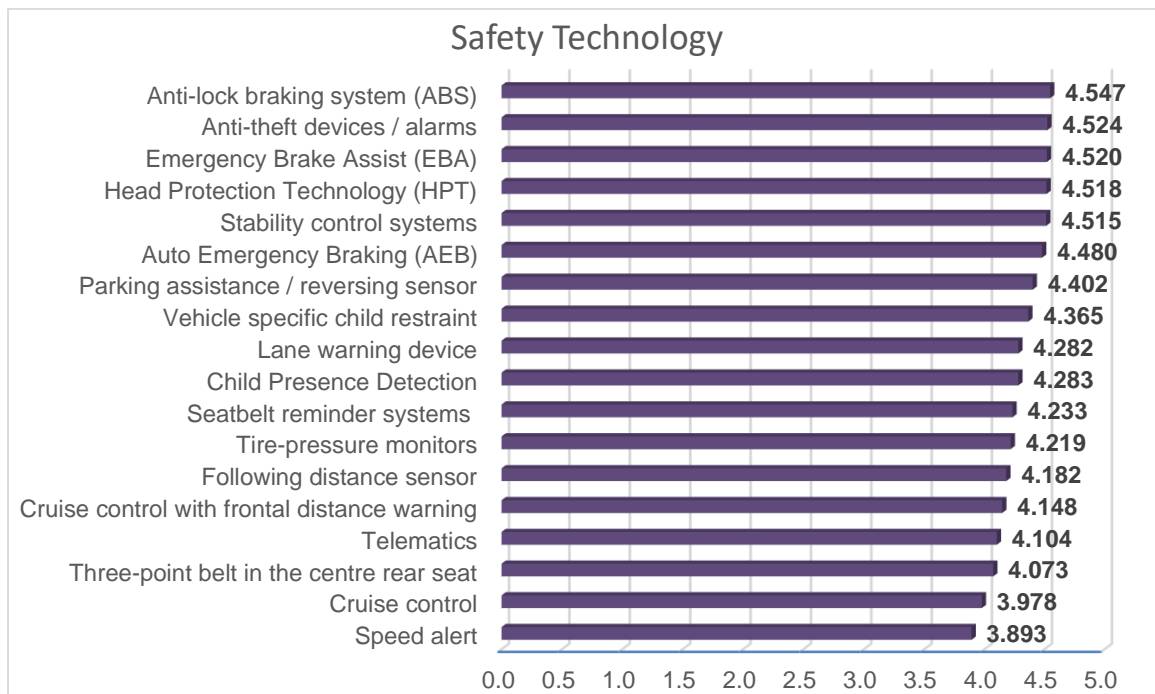
Under the comfort technology availability, the most important technology that was significant to the respondents upon their selection of a particular vehicle, is air conditioning with the number of mean being 4.58. Beside air conditioning, having a route navigation technology or device was also an important aspect of the selection in buying the vehicle. Figure 2 shows the list of priority selection for comfort technology in making the decision of buying a new vehicle.



**Figure 2:** Comfort technology

### 3.2.2 Safety Assist Technology (SAT)

Based on the graph shown in Figure 3, the highest mean recorded for safety technology was from (Q7) Anti-lock braking system with (4.55). This can prevent any unwanted incidents. Following with (Q4) Anti-Theft Devices/Alarms with 4.52 and (Q3) Emergency Braking Assist (EBA) with (4.52). For EBA, it can prevent any potential collision when the respondent can't react in time. It will react automatically during potential collision. The least mean recorded was from (Q16) Speed Alert with (3.89).

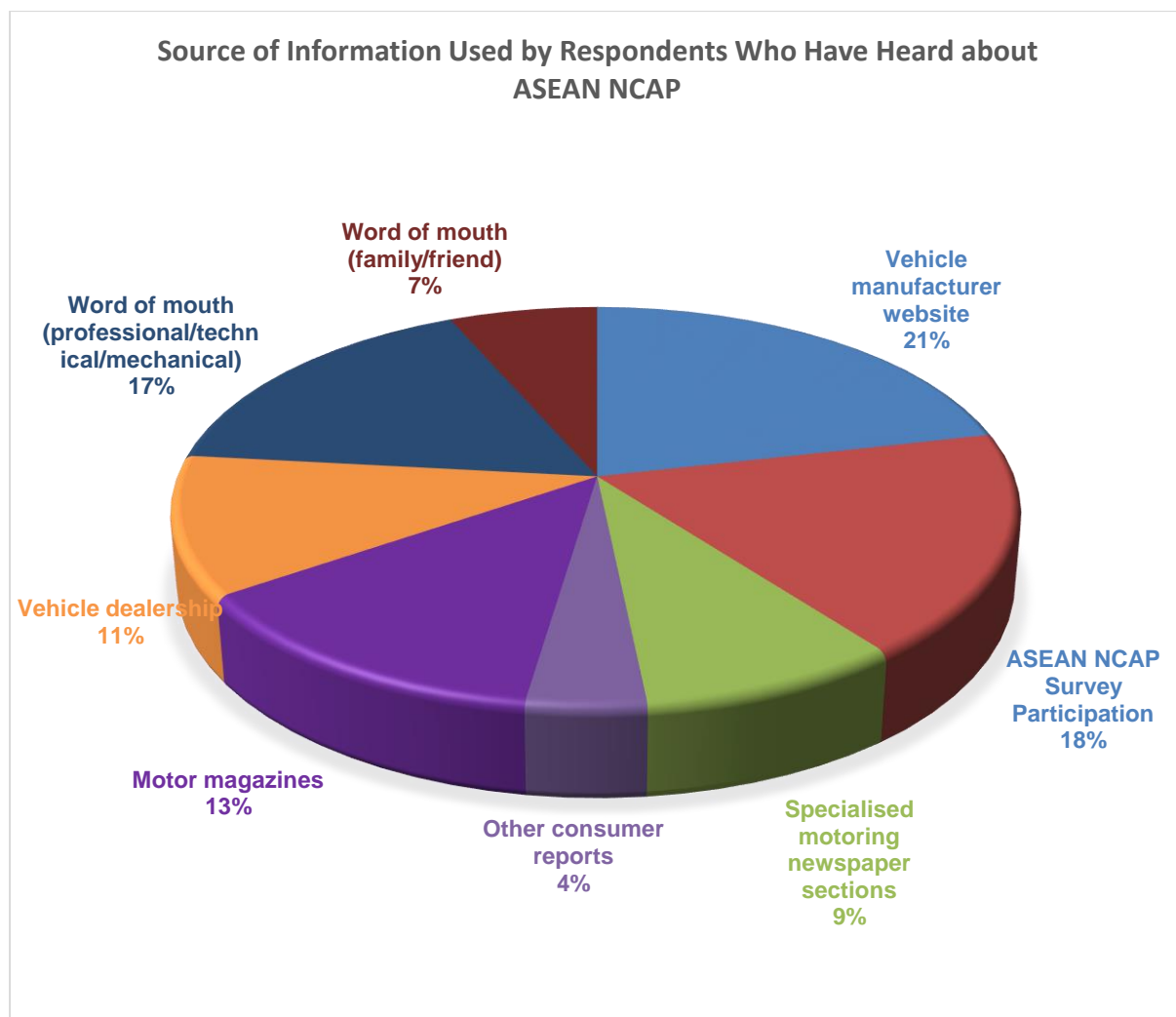


**Figure 3:** Safety technology

### 3.3 Knowledge on ASEAN NCAP

Referring to the data collected, 36 % of the total respondents were aware on the ASEAN NCAP. This shows the increment of approximately 50 % from the survey conducted by Isa et al., 2014b. Unfortunately, the level of awareness and understanding on the initiative taken through ASEAN NCAP can still be deemed as being low if judged against the year of its establishment which was eight years ago.

Majority of the respondents reported that the most influential sources to these participants was drawn from the vehicle manufacturer's website (21 %). Then, sources from the ASEAN NCAP influenced 18 % of the respondents that participated in this study. Word of mouth deliberated from technical and mechanical professionals within the automotive field, also gave a high effect that influenced respondents with 17 %. The least important sources that influenced the respondents in this study is from other consumer reports with number of percentage is 4 % only. Figure 4 shows the details of the results regarding the knowledge on ASEAN NCAP from the Malaysian consumer's perspective.



**Figure 4:** Sources of information of ASEAN NCAP

## 4.0 CONCLUSION

Three main factors that contributes towards consumer buying decision in this study were identified. Fuel economy was the main factor being considered, as is the enjoyment in having comfort during rides, whilst also having the ability of elevated safety with safety assists technology in place.

The incremental value in knowledge of vehicle safety enables the purchasers of new vehicles to make better choices with regards to safety, comfort and practicality. This study has shown that an inclination towards selecting ABS as an important feature, that augurs well for safety and transportation preferences.

Increased awareness and information on ASEAN NCAP rating has been seen based on the number of studies being carried out as to date. Nevertheless, a continuous effort by all relevant parties is needed so that this information can be delivered more extensively, thus becoming a standard guide for all users or potential vehicle buyers. The ultimate aim would be to have a decrease in reported vehicle accidents, via an increased understanding of vehicle safety factors and its effective management.

A successful safety campaign such as the ASEAN NCAP rating requires multiple inputs and dedication by various parties. This study has tried to find and consolidate the most relevant and important factors for buyers and users of automobiles, with regards to their purchasing behaviour and perception. Plus, the usage of the NCAP rating during purchase decisions among Malaysian consumers. Similarly, in another two ASEAN markets such as Thailand and Indonesia which also has big automobile markets, their buying prerequisite would not be dissimilar to the Malaysian domestic market. Comparative study can and should be done with these markets to enhance the ASEAN NCAP rating further. Through this study, the availability of its findings should generate some sense for policy makers, automotive manufacturers, transportation bodies and the consumer themselves in judging available parameters of car safety in the country.

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